

Exploring Weather Trends

Steps:

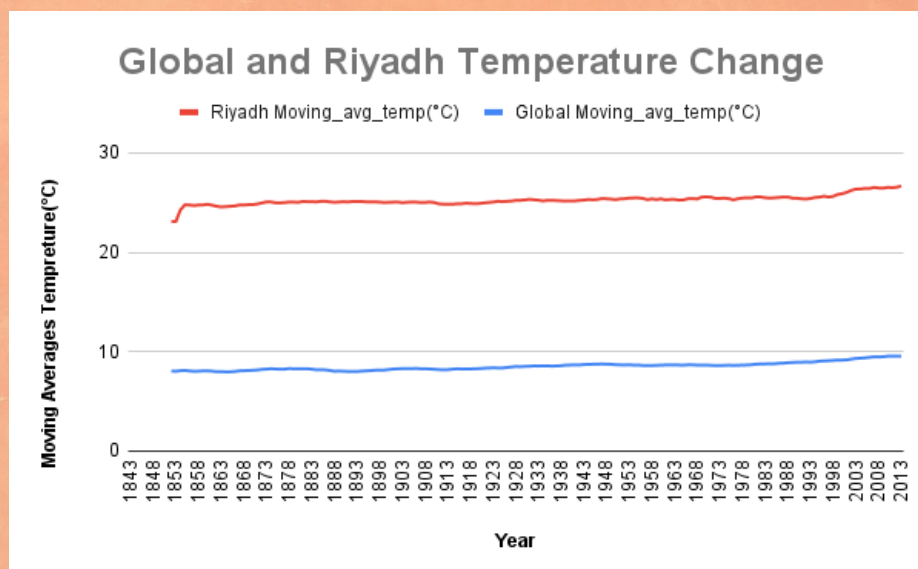
1: extract data from a database using SQL

Input		HISTORY	MENU
SCHEMA			
city_data			
city_list			
global_data			
		<pre>1 select city_data.year,city_data.avg_temp as "Riyadh avg_temp",global_data.avg_temp as "Global avg_temp" 2 from city_data 3 join global_data on city_data.year=global_data.year 4 where city_data.city ='Riyadh'</pre>	
		Success!	
		EVALUATE	
Output		171 results	
		Download CSV	
year	Riyadh avg_temp	Global avg_temp	
1843	24.74	8.17	
1844	15.45	7.65	
1845	20.82	7.85	

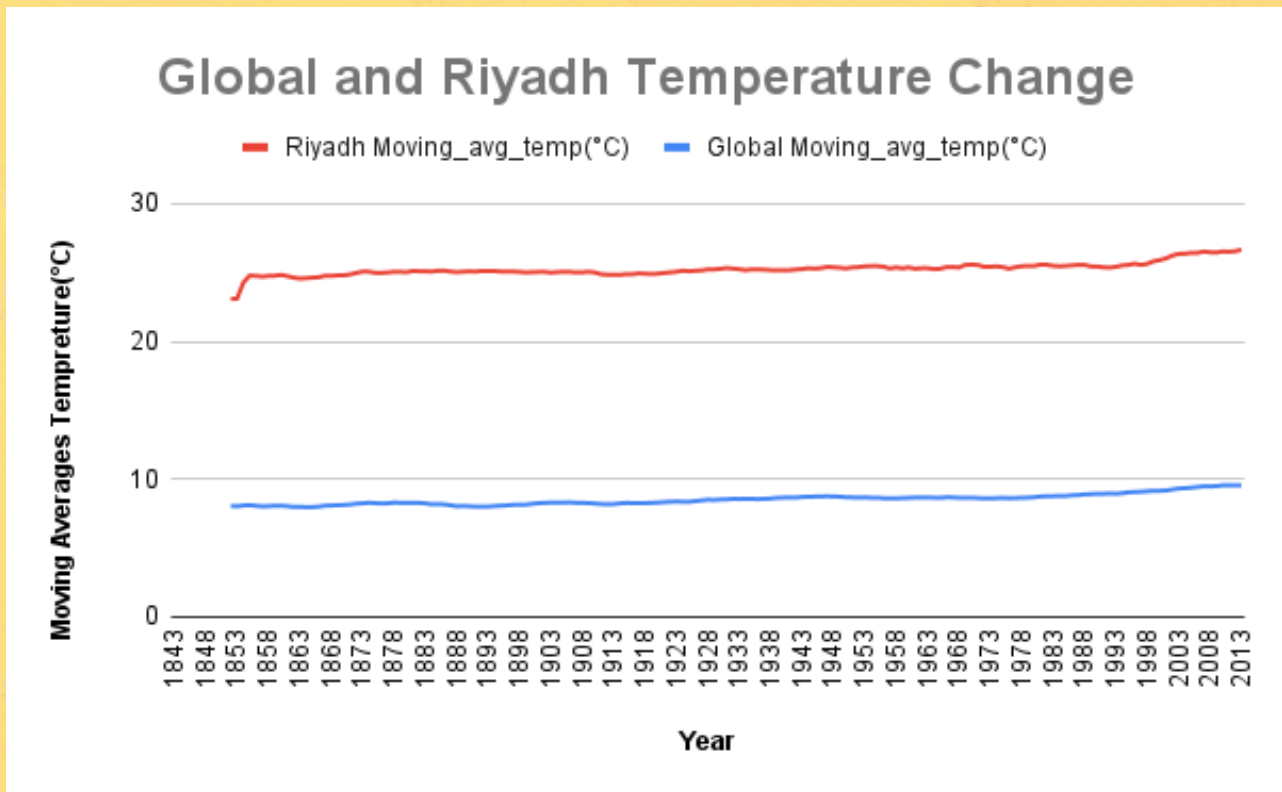
2: Moving Averages calculation using Google sheets:

E11		fx		=AVERAGE(D2:D11)	
	A	B	C	D	E
1	Year	Riyadh avg_tem	Riyadh Moving	Global avg_temp	Global Moving_avg_tem
2	1843	24.74		8.17	
3	1844	15.45		7.65	
4	1845	20.82		7.85	
5	1846	25.21		8.55	
6	1847	25.21		8.09	
7	1848	24.56		7.98	
8	1849	24.8		7.98	
9	1850	24.34		7.9	
10	1851	25.03		8.18	
11	1852	24.85	23.501	8.1	8.045
12	1853	24.93	23.52	8.04	8.032
13	1854	24.72	24.447	8.21	8.088
14	1855	24.92	24.857	8.11	8.114

3: Create line chart:



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Observations:

- 1: Riyadh is hotter than the global average temperature by a nearly constant difference.
- 2: Global temperatures are increasing over the years.
- 3: Riyadh is 16 °C hotter than the global average temperature.
- 4: Global average temperature from 1843 to 2013 is 8.5 °C while in Riyadh is 25 °C.